

AMENDED AND RESTATED LICENSE AGREEMENT

BETWEEN:

THE UNIVERSITY OF BRITISH COLUMBIA, a corporation continued under the University Act of British Columbia with its administrative offices at 2075 Wesbrook Mall, Vancouver, British Columbia, V6T 1W5

(“UBC”)

AND:

FUNCTIONAL TECHNOLOGIES CORP., a corporation incorporated under the laws of British Columbia, with its registered office at 700 - 625 Howe Street, Vancouver, British Columbia, V6C 2T6

(the “Licensee”)

WHEREAS:

A. UBC and First Venture Capital Corporation entered into a License Agreement executed by the parties on May 28, 2003 (the “**2003 License Agreement**”). On November 4, 2003 First Venture Capital Corporation changed its corporate name to First Venture Technologies Corp. and subsequent to that on May 20, 2008 changed its corporate name to Functional Technologies Corp.;

B. UBC and the Licensee have now agreed to amend and to restate the 2003 License Agreement on the terms as set out in this Amended and Restated License Agreement;

C. Under the 2003 License Agreement, UBC licensed to the Licensee certain rights to technology (defined further herein as the “**DUR1, 2 Technology**”) relating to urea degrading yeast, which research was undertaken by Dr. Hennie van Vuuren in the Food, Nutrition and Health Department of UBC, and researchers at Université Victor Segalen-Bordeaux 2 (Bordeaux, France) (“**Bordeaux**”) and Brock University (Ontario, Canada) (“**Brock**”); Bordeaux and Brock have executed certain assignments (the “**Assignments**”) assigning their rights to the DUR1, 2 Technology to UBC as attached hereto as Schedule “A”;

D. Since executing the 2003 License Agreement, UBC's researchers, Dr. Hennie van Vuuren and Dr. John Ivan Husnik (the “**Investigators**”) have conducted further research resulting in the development of a new technology (defined further herein as the “**DUR3 Technology**”) relating to the metabolic engineering of the yeast *Saccharomyces cerevisiae* to minimize production of ethyl carbamate via constitutive expression of the urea transporter DUR3. On or about May 31, 2007, Dr. Husnik ceased to be employed by UBC and subsequently commenced working for the Licensee where he has been involved in research and development activities on behalf of the Licensee. UBC has agreed to license the DUR3 Technology to the Licensee on the terms and conditions set out in this Amended and Restated License Agreement; and

E. It is UBC's objective to exploit its technology for the public benefit, and in accordance with UBC's Global Access Principles, and to generate further research in a manner consistent with its status as a non-profit, tax exempt educational institution.

THE PARTIES AGREE AS FOLLOWS:

1.0 DEFINITIONS:

1.1 In this Agreement:

- (a) **"Accounting"** means an accounting statement setting out in reasonable detail how the amount of Revenue was determined;
- (b) **"Affiliated Company"** or **"Affiliated Companies"** means two or more corporations where the relationship between them is one in which one of them is a subsidiary of the other, or both are subsidiaries of the same corporation, or fifty percent (50%) or more of the voting shares of each of them is owned or controlled by the same person, corporation or other legal entity;
- (c) **"Agreement"** means this Amended and Restated License Agreement;
- (d) **"Confidential Information"** means all information, regardless of its form:
 - (i) designated by UBC as confidential, whether orally or in writing, including without limitation all information related to the Technology (including all derived analyses and conclusions); or
 - (ii) designated by the Licensee as confidential, whether orally or in writing,except that "Confidential Information" does not include information:
 - (iii) possessed by the recipient (the **"Recipient"**) prior to receipt from the disclosing party (the **"Discloser"**), other than through prior disclosure by the Discloser, as evidenced by the Recipient's business records;
 - (iv) published or available to the general public otherwise than through a breach of this Agreement;
 - (v) obtained by the Recipient from a third party with a valid right to disclose it, provided that the third party is not under a confidentiality obligation to the Discloser; or
 - (vi) independently developed by directors, officers, employees, agents or consultants of the Recipient who had no knowledge of or access to the Discloser's information as evidenced by the Recipient's business records;
- (e) **"CRA"** means the collaborative research agreement described in Article 11.4(c);
- (f) **"Direct End-User"** means a customer which purchases Products directly from the Licensee for the limited purpose of the production of its own beverages or other products and who may use such Products for the purposes of re-generating additional Products provided that such additional Products are not resold or distributed to any other party and are used solely for internal consumption by the customer in connection with the production of its own beverages or other products;
- (g) **"DUR1, 2 Technology"** is defined in Schedule "B";
- (h) **"DUR3 Technology"** is defined in Schedule "B";

- (i) **"Effective Termination Date"** means the date on which this Agreement is terminated under Article 18;
- (j) **"Execution Date"** means the date of execution of this Agreement as set forth on the signature page of this Agreement;
- (k) **"First Use of the Technology"** means the earlier of either:
 - (i) the first use of the Technology or any Improvement, or
 - (ii) the first sale of a Product,in exchange for valuable consideration;
- (l) **"GAAP"** means Canadian generally accepted accounting principles consistently applied or International Financial Reporting Standards, whichever of the two accounting standards are followed by the Licensee in the preparation of its financial statements;
- (m) **"Improvements"** means improvements, variations, updates, modifications, enhancements and developments of the Technology made or conceived after the Start Date and during the term of this Agreement by either: a) the Investigators while employed by UBC, or b) the Licensee;
- (n) **"Product(s)"** means goods or services manufactured or provided in connection with the use of all or some of the Technology and/or any Improvements;
- (o) **"Qualifying Transaction"** means a transaction accepted by the TSX Venture Exchange whereby a company designated as a capital pool corporation under the policies of the TSX Venture Exchange acquires significant assets, other than cash, by way of purchase, amalgamation, merger or arrangement with another company or by other means;
- (p) **"Revenue"** means all revenues, receipts, monies, and the value, determined with reference to GAAP, of any shares or other securities and all other consideration directly or indirectly collected or received whether by way of cash, credit or other value received by the Licensee (but not including Sublicensing Revenue) from the marketing, manufacturing, sale or distribution of the Technology and any Improvements and/or any Products prior to the expiry of patent(s) applicable thereto, except where such activities are undertaken under a sublicensing arrangement, less direct sales taxes and customs duties applied on the sales of Products; the calculation of Revenue with respect to the Technology, Improvements or a specific Product shall continue only until the expiry of the last patent applicable to the Technology and any patents covering Improvements applicable to that Product;
- (q) **"Royalty Due Dates"** means the last working day of March, June, September and December of each year during the term of this Agreement;
- (r) **"Start Date"** means the Start date of the 2003 License Agreement, which was July 1, 2003;

- (s) **"Sublicensing Revenue"** means all revenues, receipts, monies, and the value, determined with reference to GAAP, of any shares or other securities and all other consideration directly or indirectly collected or received whether by way of cash, credit or other value received by the Licensee pursuant to each sublicense agreement relating to the Technology and any Improvements, and/or any Products. For greater clarity, it is confirmed that Sublicensing Revenue will include all:
- (i) milestone payments, royalties, license fees; and
 - (ii) research or development fees in excess of the direct reimbursement for the actual costs of such research and development incurred by the Licensee pursuant to a written research plan and agreement,
- received by the Licensee from any sublicensee relating to the Technology or Improvements; the calculation of Sublicensing Revenue with respect to the Technology, Improvements or a specific Product shall continue only until the expiry of the last patent applicable to the Technology and any patents covering Improvements applicable to that Product;
- (t) **"Technology"** means collectively the DUR1, 2 Technology and the DUR3 Technology and all knowledge, know-how and/or technique or techniques invented, developed and/or acquired, before the Execution Date relating to, and including, the technology described in Schedule "B" of this Agreement, as amended from time to time, including, without limitation all related research, data, specifications, instructions, manuals, papers or other related materials of any nature at all, whether written or otherwise, and UBC's Confidential Information; and
- (u) **"UBC Trade-marks"** means any mark, trade-mark, service mark, logo, insignia, seal, design or symbol used by UBC in any manner at all.

2.0 PROPERTY RIGHTS IN AND TO THE TECHNOLOGY:

2.1 The Licensee acknowledges and agrees that nothing in this Agreement shall be construed as transferring to the Licensee ownership of the Technology or any Improvements.

2.2 The Licensee will, at the written request and expense of UBC, sign all documents as may be reasonably required to confirm that ownership of the Technology or any Improvements are not transferred to the Licensee under this Agreement.

2.3 On the last working day of June and December of each year during the term of this Agreement, the Licensee will give notice to UBC of the details of all Improvements which the Licensee has developed and/or acquired during the previous six month period, using the template provided in Schedule "C".

2.4 Based upon the Assignments and to the best of the knowledge of UBC without having made any specific inquiries, UBC represents and warrants that it has the right to grant this License to the Licensee and that it is not aware of any adverse claims being made in connection with the Technology.

3.0 **GRANT OF LICENSE:**

3.1 Subject to Article 3.4, UBC grants to the Licensee an exclusive, world-wide license to use and sublicense the Technology and any Improvements (including reissues, divisions, renewals or extensions of the patents listed in Schedule "B") and to manufacture, market, distribute, and sell the Products on the terms and conditions set out in this Agreement.

3.2 The license granted under this Agreement is granted only to the Licensee and not to any Affiliated Companies, except as provided under Article 14.1.

3.3 The Licensee will not cross-license the Technology or any Improvements without the prior written consent of UBC.

3.4 The Licensee acknowledges and agrees that:

- (a) UBC hereby reserves for itself and for Bordeaux and Brock (collectively referred to as the "**Universities**") the right, subject to compliance with Article 10.3, to use the Technology and any Improvements without charge in any manner at all for research, scholarly publication, educational and all other non-commercial uses;
- (b) it is UBC's objective to exploit its technology for the public benefit, in harmony with its Global Access Principles launched by UBC in November 2007 and as outlined at www.uilo.ubc.ca/global.asp, and to generate further research in a manner consistent with UBC's status as a non-profit, tax exempt educational institution. In furtherance of these Global Access Principles UBC and the Licensee therefore agree to adjust the Licensee's Product pricing and the corresponding royalty rates payable to UBC with regards to any specific Products sold in developing countries on a case by case basis in a manner consistent with UBC's Global Access Principles.

3.5 As a condition of UBC entering into the 2003 License Agreement, UBC acknowledges that the Licensee paid to UBC an initial license fee of \$ ■ {Note: The omitted information is the amount of the fee} (Canadian funds) (the "**Initial License Fee**"). The Initial License Fee was paid upon the satisfaction or waiver of the Conditions Precedent, and will not be refunded to the Licensee (in whole or in part) under any circumstances.

3.6 UBC will register a financing statement regarding this Agreement under the *Personal Property Security Act* of British Columbia and/or under similar legislation in those jurisdictions in which the Licensee carries on business and/or has its chief place of business. The Licensee will pay for all costs associated with such registrations and make further filings if sublicenses are granted.

3.7 The Licensee will keep UBC advised of any changes to jurisdiction applicable to itself. The Licensee will give notice to UBC if it is carrying on business and/or locates its chief place of business in a jurisdiction outside British Columbia before starting business in that other jurisdiction. If UBC has registered a financing statement under Article 3.6, the Licensee will file within 15 days of any change in jurisdiction, the appropriate documents in the Personal Property Registries or similar registries outside of British Columbia, to the extent that such filing is available, to document the change in jurisdiction and will provide UBC a copy of the verification statement regarding each filing within 15 days after receiving the verification statement. The Licensee will pay for all reasonable costs associated with the registrations under this Article 3.7.

3.8 On November 3, 2003 the Licensee delivered to UBC 1,116,667 common shares in partial consideration for the grant of the 2003 License Agreement. Neither all nor any portion of said shares shall be refundable to the Licensee under any circumstance. The shares will be subject to the trading restrictions and escrow requirements imposed under applicable securities laws and TSX Venture Exchange policies.

4.0 SUBLICENSING:

4.1 The Licensee will have the right to sublicense the Technology to Affiliated Companies or other third parties, upon notice to UBC, if such sublicense agreements incorporate UBC's mandatory sublicensing provisions listed in Schedule "D". If the license granted in Article 3.1 has changed from exclusive to non-exclusive pursuant to Article 11.7, UBC's prior written consent (not to be unreasonably withheld) shall be required. The Licensee will provide UBC with a signed copy of each sublicense granted within 30 days of it being signed by all parties to the sublicense.

4.2 Any sublicense granted by the Licensee will be granted only to the sublicensee and cannot be assigned or further sub-sublicensed without the prior written consent of UBC.

4.3 Before executing a sublicense, the Licensee will give notice to UBC of the jurisdictions in which the sublicensee is carrying on business. If the Licensee, during the term of the sublicense, becomes aware of the sublicensee carrying on business in another jurisdiction, then the Licensee will give notice to UBC within 5 business days. If UBC has registered a financing statement under Article 3.6, the Licensee will, immediately after executing the sublicense, register a financing change statement under the *Personal Property Security Act* of British Columbia and/or, to the extent such registration is available, any similar legislation in those jurisdictions in which each sublicensee carries on business and has its chief place of business to add each sublicensee to the registration referred to in Article 3.6, and will provide UBC with a copy of the verification statement or equivalent document within 15 days after receiving the same. If any sublicensee changes the jurisdiction within which it is carrying on business and/or the location of its chief place of business, the Licensee will, upon becoming aware of such change of jurisdiction, file the appropriate documents in the Personal Property Registries or similar registries within or outside of Canada to document the changes in jurisdiction. The Licensee will pay for all reasonable costs associated with the filings under this Article 4.3.

5.0 ROYALTIES:

5.1 In consideration of the license granted under this Agreement, the Licensee will pay to UBC the following royalties:

- (a) a royalty equal to ■ %¹ of the Revenue arising from Products which practice solely the DUR1, 2 Technology (or any Improvement of the DUR1, 2 Technology) OR solely the DUR3 Technology (or any Improvement of the DUR3 Technology); or
- (b) a royalty equal to ■ %¹ of the Revenue arising from Products which practice the DUR1, 2 Technology (or any Improvement of the DUR1, 2 Technology) AND the DUR3 Technology (or any Improvement of the DUR3 Technology) together in the same yeast cell; and

¹ Note: the omitted information is the specific percentage

- (c) a royalty equal to ■ %¹ of the Sublicensing Revenue.

For greater clarity it is confirmed that:

- (d) the purposes of determining the applicable royalty rates under Article 5.1(a), (b) and (c) above, any Revenue received by the Licensee from a Direct-End User will be considered Revenue under Article 5.1(a) or (b) rather than Sublicensing Revenue under Article 5.1(c);
- (e) the word "solely" in Article 5.1(a) is intended to only apply to exclude the Revenue received from practice of the DUR1, 2 Technology (or any Improvement of the DUR1, 2 Technology) when practiced together in the same yeast cell with the DUR3 Technology (or any Improvement of the DUR3 Technology), and therefore the ■ %¹ royalty set in Article 5.1(a) will be payable on any revenue received from the practice of either the DUR1, 2 Technology (or any Improvement of the DUR1, 2 Technology) or the DUR3 Technology (or any Improvement of the DUR3 Technology) if used in combination with any other technologies developed by either the Licensee or licensed or acquired by the Licensee from any third party;
- (f) for the purposes of Article 6.1, the royalties payable under this Article 5.1 are referred to as "earned royalties".

5.2 It is anticipated that the Licensee may need to enter into additional royalty bearing technology licenses with arm length third parties which are advantageous in order to practice and maximize the commercial success of the Technology and/or Improvements and/or Products as implemented in the same yeast cell in any given country. UBC therefore agrees if:

- (a) the Licensee has entered into one or more such arms length licenses with one or more non-Affiliated Companies or third parties (the "**Third Party**"); and
- (b) the technology licensed by the Licensee from the third Party will be used and practiced by the Licensee in the same yeast cell together with both the DUR1, 2 Technology (or any Improvement of the DUR1, 2 Technology) AND the DUR3 Technology (or any Improvement of the DUR3 Technology) to produce a Product (the "**3 Technology Product**"), and
- (c) the combined royalty rate payable by the Licensee to both UBC and the Third Party on Revenue received from the 3 Technology Product in any country exceeds a total of ■ %¹ of such Revenue,

then the ■ %¹ royalty rate payable by the Licensee to UBC on Revenue received from the 3 Technology Product will (on a country by country basis) be reduced as follows:

$$\text{■ \%}^1 - \left(\frac{\text{A}}{2} \right) = \text{Reduced Royalty Rate Payable to UBC}$$

where "A" is equal to the royalty rate payable by the Licensee on the sale of the 3 Technology Product;

¹ Note: the omitted information is the specific percentage

Provided that in no event shall the reduced royalty rate payable to UBC with respect to a 3 Technology Product ever be reduced to less than $\square\%$ ¹. For greater clarity it is confirmed that:

- (d) if the royalties paid by the Licensee to the Third Party is subsequently reduced or eliminated, then the royalty payable to UBC under this Agreement shall thereafter be readjusted upwards to the original values to reflect this change;
- (e) the Licensee shall keep complete and accurate books of accounts containing all details which may be reasonably necessary for the purpose of showing the royalties payable to UBC and any purported reduction under this Article 5.2. Such book of accounts shall during all reasonable times be open for inspection at reasonable times by UBC in accordance with Article 12;
- (f) by way of example:
 - (i) if the royalty rate payable by the Licensee to a Third Party with respect to a 3 Technology Product was $\square\%$ ¹, then the royalty payable to UBC would be adjusted as follows: $\square\% - (\square\% / 2) = \square\%$ ¹
 - (ii) if the royalty rate payable by the Licensee to a Third Party with respect to a 3 Technology Product was $\square\%$ ¹, then the royalty payable to UBC would be adjusted as follows: $\square\% - (\square\% / 2) = \square\%$ ¹. However, because $\square\%$ ¹ is less than the minimum $\square\%$ ¹ royalty rate, the royalty rate payable to UBC would be set at $\square\%$ ¹;
 - (iii) if the royalty rate payable by the Licensee to a Third Party with respect to a 3 Technology Product was $\square\%$ ¹, then there would be no adjustment of the UBC royalty rate, because the sum of the Third Party royalty rate and the UBC royalty rate do not exceed $\square\%$ ¹.

5.3 The royalties are due and payable within 30 days of each respective Royalty Due Date and are to be calculated with respect to the Revenue and the Sublicensing Revenue in the three month period immediately before the applicable Royalty Due Date.

5.4 All royalties paid by the Licensee to UBC under this Agreement will be in Canadian dollars without any reduction or deduction of any nature or kind at all except as permitted under Article 8.5. If the Licensee receives any Revenue or Sublicensing Revenue in a currency other than Canadian dollars, the currency will be converted to the equivalent in Canadian dollars on the next Royalty Due Date, at a rate equal to the average of the rates of exchange set by the Bank of Montreal for buying and selling that currency. The amount of Canadian dollars resulting from the conversion is to be included in Revenue or Sublicensing Revenue.

5.5 Products are to be deemed to have been sold by the Licensee and included in the Revenue when payment has been received by the Licensee. The Licensee is deemed to receive Sublicensing Revenue when the consideration has been received by the Licensee.

5.6 Any transaction, disposition, or other dealing involving all or part of the Technology or any Improvements or Products, between the Licensee and an entity of which the Licensee holds at least 10% of the equity or debt convertible into at least 10% of the equity that is not made at fair market value is deemed to have been made at fair market value, and the fair

¹ Note: the omitted information is the specific percentage

market value of the transaction, disposition, or other dealing will be added to and deemed part of the Revenue or the Sublicensing Revenue, as the case may be, and will be included in the calculation of royalties under this Agreement.

5.7 UBC agrees that, upon the Licensee's request, it will negotiate in good faith the terms of a fully paid up license for the Technology and Improvements but UBC shall not be obligated to enter into an agreement on terms it does not, acting reasonably, consider acceptable.

6.0 **ANNUAL PAYMENTS:**

6.1 The Licensee shall pay to UBC the following minimum annual royalties (in Canadian funds):

Date	DUR1, 2 Technology	DUR3 Technology	Total Minimum Annual Royalty
January 1, 2009	\$ ■ ¹	\$ ■ ¹	\$ ■ ¹
January 1, 2010	\$ ■ ¹	\$ ■ ¹	\$ ■ ¹
January 1, 2011	\$ ■ ¹	\$ ■ ¹	\$ ■ ¹
January 1, 2012	\$ ■ ¹	\$ ■ ¹	\$ ■ ¹
January 1, 2013	\$ ■ ¹	\$ ■ ¹	\$ ■ ¹
January 1, 2014	\$ ■ ¹	\$ ■ ¹	\$ ■ ¹
January 1, 2015 and annually thereafter	\$ ■ ¹	\$ ■ ¹	\$ ■ ¹

The minimum annual royalty payments set out above shall be non-refundable except that the amount by which the minimum royalty exceeds earned royalties in that year shall be credited against earned royalties payable by the Licensee in the same calendar year.

6.2 The Licensee will pay to UBC, in addition to all other amounts due under this Agreement, an annual maintenance fee of \$ ■¹ (the "**Annual Maintenance Fee**"). The Annual Maintenance Fee, commencing on January 1, 2009 is payable on or before January 1st of each year during the term of this Agreement and will not be refunded to the Licensee, in whole or in part, under any circumstances.

7.0 **PATENTS:**

7.1 The Licensee may identify any process, use or products arising out of the Technology and any Improvements that may be patentable and UBC will, on the request of the Licensee, take all steps reasonably requested by the Licensee to apply for, obtain and maintain a patent in the name of UBC provided that the Licensee pays all costs of applying for, registering and maintaining the patent in the jurisdictions in which the Licensee designates that

¹ Note: the omitted information is the specific payment amount

a patent is required. The Licensee will on UBC's request pay to UBC a reasonable payment as an advance against expected patent expenses.

7.2 On the issuance of a patent obtained under Article 7.1, the Licensee becomes the licensee of the patent on the terms and conditions set out in this Agreement.

7.3 On execution of the 2003 License Agreement, the Licensee deposited into trust with a law firm acceptable to UBC the sum of \$12,755.36 Cdn (the "**Initial Reimbursement Amount**") which was the amount of patent costs relating to the Technology incurred to April 1, 2003. The Initial Reimbursement Amount was released to UBC upon satisfaction or waiver of the Conditions Precedent. If the Conditions Precedent were not satisfied or waived in accordance with the 2003 License Agreement, then the Initial Reimbursement Amount was to be returned to the Licensee.

7.4 On the Execution Date of this amended and restated Agreement, the Licensee will reimburse UBC for the costs of \$4,216.30 incurred by UBC in connection with the preparation and filing of US Provisional Patent Application #61/071,138.

7.5 The Licensee will not contest the validity or scope of any patents relating to the Technology and any Improvements licensed under this Agreement.

7.6 The Licensee will ensure proper patent marking for all uses of the Technology and any Improvements licensed under this Agreement and will clearly mark the appropriate patent numbers on any Products made using the Technology and any Improvements.

8.0 DISCLAIMER OF WARRANTY:

8.1 UBC makes no representations, conditions or warranties, either express or implied, regarding the Technology or any Improvements or the Products except as set out in Article 2.4 of the 2003 License Agreement and this Agreement. Without limitation, UBC specifically disclaims any implied warranty, condition or representation that the Technology, any Improvements or the Products:

- (a) correspond with a particular description;
- (b) are of merchantable quality;
- (c) are fit for a particular purpose; or
- (d) are durable for a reasonable period of time.

UBC is not liable for any loss, whether direct, consequential, incidental or special, which the Licensee or other third parties suffer arising from any defect, error or fault of the Technology or any Improvements or Products, or their failure to perform, even if UBC is, following the execution of the 2003 License Agreement, advised of the possibility of the defect, error, fault or failure. Without restricting the foregoing, UBC agrees to notify the Licensee upon learning of any such possible defect, error, fault or failure. The Licensee acknowledges that it has been advised by UBC to undertake its own due diligence regarding the Technology and any Improvements.

8.2 Nothing in this Agreement:

- (a) constitutes a warranty or representation by UBC as to title to the Technology, except as set out in Article 2.4 of the 2003 License Agreement and this Agreement, and/or any Improvements or that anything made, used, sold or otherwise disposed of under the license granted in this Agreement is or will be free from infringement of patents, copyrights, trade-marks, industrial design or other intellectual property rights; or
- (b) imposes an obligation on UBC to bring, prosecute or defend actions or suits against third parties for infringement of patents, copyrights, trade-marks, industrial designs or other intellectual property or contractual rights.

8.3 Notwithstanding Article 8.2, if there is an alleged infringement of the Technology or any Improvements or any right with respect to the Technology or any Improvements, the Licensee may, on giving notice to UBC, prosecute litigation designed to enjoin infringers of the Technology or any Improvements. UBC agrees to reasonably co-operate to the extent of signing all necessary documents and to vest in the Licensee the right to institute and conduct the litigation, provided that all the direct and indirect costs and expenses of bringing and conducting the litigation or settlement are paid by the Licensee. UBC may, at its option exercisable before the Licensee begins to incur patent enforcement costs, elect to share in the costs of enforcing any patent up to an equal percentage with the Licensee unless the Licensee otherwise agrees, and will share in the proceeds of such enforcement *pro rata* to its contribution.

8.4 If any complaint alleging infringement of any patent or other proprietary rights is made against UBC or against the Licensee, or upon the Licensee becoming aware of such a complaint being made against a sublicensee of the Licensee, regarding the use of the Technology or any Improvements or the manufacture, use or sale of the Products, the following procedure will be adopted:

- (a) the Licensee will promptly notify UBC upon the Licensee's receipt of the complaint and will keep UBC fully informed of the actions and positions taken by the complainant and taken or proposed to be taken by the Licensee on behalf of itself or a sublicensee;
- (b) UBC will promptly notify the Licensee upon UBC's receipt of the complaint and the Licensee will thereafter handle all matters pertaining to the complaint in accordance with this Article 8.4. UBC will keep the Licensee fully informed of the actions and positions taken by the complainant of which UBC becomes aware, and the Licensee will keep UBC fully informed of the actions taken or proposed to be taken by the Licensee in connection with the complaint;
- (c) except as provided in Article 8.4(e) or unless the complaint arises from or in connection with a breach of any of UBC's representations or warranties made in this Agreement, all costs and expenses incurred by the Licensee or any sublicensee of the Licensee in investigating, resisting, litigating and settling the complaint, including the payment of any award of damages and/or costs to any third party, will be paid by the Licensee or any sublicensee of the Licensee, as the case may be;
- (d) no decision or action concerning or governing any final disposition of the complaint will be taken without full consultation with, and approval by, UBC acting reasonably;

- (e) UBC may elect to participate as a party in any litigation involving the complaint to the extent that the court may permit, but any additional expenses generated by such participation will be paid by UBC (subject to the possibility of recovery of some or all of the additional expenses from the complainant);
- (f) notwithstanding Article 8.2, if the complainant is willing to accept an offer of settlement and one of the parties to this Agreement is willing and able to make or accept the offer and the other is not, then the unwilling party will conduct all further proceedings at its own expense, and is responsible for the full amount of any damages, costs, accounting of profits and settlement costs in excess of those provided in the offer, but is entitled to retain for itself the benefit of any litigated or settled result giving a lower payment of costs, damages, accounting of profits and settlement costs than that provided in the offer; and
- (g) the Licensee will pay all royalties payable under this Agreement to UBC in trust from the date UBC receives notice of the complaint and until a resolution of the complaint has been finalized. If the complainant is successful, then the royalties paid to UBC in trust under this Article 8.4(g) will be returned to the Licensee, provided that the amount being returned to the Licensee is no more than the amount paid by the Licensee to the complainant in the settlement or other disposition of the complaint. If the complainant does not succeed, then UBC retains all royalties paid to it under this Article 8.4(g).

8.5 UBC and the Licensee agree that any proceeds received by the Licensee from enforcing or defending the patents covering the Technology and any Improvements shall be included in Revenue except that the Licensee shall be entitled to deduct therefrom an amount equal to two times the costs incurred by the Licensee with outside parties directly relating to enforcing or defending the said patents, upon which amount no royalties shall be payable.

9.0 INDEMNITY AND LIMITATION OF LIABILITY:

9.1 The Licensee indemnifies, holds harmless and defends UBC, its Board of Governors, officers, employees, faculty, students, invitees and agents against any and all claims (including all reasonable associated legal fees and disbursements actually incurred) arising out of the exercise of any rights under this Agreement, including without limitation against any damages or losses, consequential or otherwise, arising in any manner at all from or out of the use of the Technology or any Improvements or Products licensed under this Agreement by the Licensee or its sublicensees or their customers or end-users, except for claims originating from matters prior to the date that all of the Conditions Precedent are satisfied or waived, claims that arise under or in respect of the CRA or the right of UBC to grant this license.

9.2 Subject to Article 9.3, UBC's total liability, whether under the express or implied terms of this Agreement, in tort (including negligence) or at common law, for any loss or damage suffered by the Licensee, whether direct, indirect or special, or any other similar damage that may arise or does arise from any breaches of this Agreement by UBC, its Board of Governors, officers, employees, faculty, students or agents, is limited to the aggregate of:

- (a) \$10,000 cash; and
- (b) the balance of the common shares of the Licensee of which UBC then is the registered or beneficial owner, which shares shall be returned to the Licensee's

treasury, provided always that the Licensee acknowledges that UBC will be transferring a portion of the common shares of the Licensee to the inventors of the Technology.

9.3 The Licensee acknowledges and agrees that UBC will not be liable for consequential or incidental damages arising from any breach or breaches of this Agreement.

9.4 Notwithstanding the termination or expiry of this Agreement, the obligations set out in this Article 9 will survive and continue to bind the Licensee and UBC and their respective successors and assigns.

10.0 PUBLICATION AND CONFIDENTIALITY:

10.1 Each party will keep and use the other party's Confidential Information in confidence and will not, without the other party's prior written consent, disclose the other party's Confidential Information to any person or entity, except to the party's directors, officers, employees, consultants, faculty, students and professional advisors (collectively, the "**Approved Persons**") who require the Confidential Information to assist such party in performing its obligations under this Agreement and carrying on its business. Each party will maintain an appropriate internal program limiting the distribution of the other party's Confidential Information to only those Approved Persons who have signed appropriate non-disclosure agreements.

10.2 Any party required by judicial or administrative process to disclose the other party's Confidential Information, will promptly notify the other party and allow it reasonable time (to the extent reasonably possible under such judicial or administrative process) to oppose the process before disclosing the Confidential Information.

10.3 The Universities are not restricted from presenting at symposia, national or regional professional meetings, or from publishing in journals or other publications, accounts of their respective research relating to the Technology and any Improvements, provided that the Licensee is provided with copies of the proposed disclosure at least 60 days before the presentation or publication date and does not, within 30 days after delivery of the proposed disclosure, give notice to UBC indicating that it objects to the proposed disclosure. Any objection to a proposed disclosure will specify the portions of the proposed disclosure considered objectionable (the "**Objectionable Material**"). On receiving notice from the Licensee that any proposed disclosure contains Objectionable Material, UBC and the Licensee agree to work together to revise the proposed disclosure to remove or alter the Objectionable Material in a manner acceptable to both the Licensee and UBC, in which case the Licensee will withdraw its objection. The Universities are not restricted from publishing or presenting the proposed disclosure as long as the Objectionable Material has been removed. Any Objectionable Material will not be disclosed for six months from the date UBC delivered the proposed disclosure to the Licensee or, upon the Licensee's written request, such longer period as UBC may approve in its sole discretion within the maximum period permitted by its policies. After six months, or such longer period to which UBC may have agreed, from the date UBC delivered the proposed disclosure to the Licensee, the Universities are free to present and/or publish the proposed disclosure whether or not it contains Objectionable Material. The Licensee will be authorized to subsequently reprint or otherwise reproduce such presentations and publications, subject to third party copyright restrictions.

10.4 The Licensee requires of UBC, and to the extent permitted by law UBC agrees, that this Agreement, and each part of it, is confidential and will not be disclosed to third parties

without the prior written consent of the Licensee, as the Licensee claims that the disclosure would or could reveal commercial, scientific or technical information and would significantly harm the Licensee's competitive position and/or interfere with the Licensee's negotiations with prospective sublicensees. Notwithstanding anything contained in this Article 10.0, the Licensee acknowledges and agrees that UBC may disclose this Agreement to the Universities and may identify the title of this Agreement, the parties to this Agreement and the names of the inventors of the Technology and any Improvements.

10.5 Notwithstanding the termination or expiry of this Agreement, the obligations set out in this Article 10 survive and continue to bind the parties, their successors and assigns.

11.0 PRODUCTION AND MARKETING:

11.1 The Licensee will not use any UBC Trade-marks or make reference to UBC or its name in any advertising or publicity, without the prior written consent of UBC (such consent not to be unreasonably withheld). Without limitation, the Licensee will not issue a press release disclosing the name of UBC without first obtaining UBC's written consent (such consent not to be unreasonably withheld). If the Licensee is required by law to act in breach of this Article, the Licensee will provide UBC with reasonably sufficient prior notice, to the extent reasonably permitted by law, to permit UBC to bring an application or other proceeding to contest the requirement.

11.2 The Licensee represents and warrants to UBC that it has, or will have at the commercially necessary time, the infrastructure, expertise and resources to:

- (a) develop and commercialize the Technology;
- (b) track and monitor on an ongoing basis performance under the terms of each sublicense entered into by the Licensee;
- (c) monitor on a world wide basis patent infringement regarding any patent relating to the Technology and any Improvements licensed under this Agreement; and
- (d) handle the Technology and any Improvements with care and without danger to the Licensee, its employees, agents, or the public.

11.3 The Licensee represents and warrants to UBC that it will, throughout the term of this Agreement:

- (a) allocate to the development and commercialization of the Technology at least the same degree of diligence, expertise, infrastructure, and resources as the Licensee is allocating to the most favoured technology developed and marketed by the Licensee; and
- (b) use its commercially reasonable efforts to promote, market and sell the Products and exploit the Technology and to meet or cause to be met the market demand for the Products and the use of the Technology. The Licensee shall also, in its sole discretion, use commercially reasonable efforts to promote, market and sell the Products which incorporate any Improvements and exploit the Improvements and meet or cause to be met the market demand for Products which incorporate any Improvements and the use of any Improvements.

11.4 Without limiting the generality of Article 11.3, since signing the 2003 License Agreement, the Licensee:

- (a) has completed approximately \$500,000 in equity financing within 24 months of the execution of the 2003 License Agreement;
- (b) has retained, subject to the terms of a consulting, Dr. Hennie van Vuuren to assist in the scientific and technical development of the Technology;
- (c) has entered into a three-year CRA with UBC, substantially under UBC's standard terms and conditions under which the Licensee sponsored the research to be led by Dr. Hennie van Vuuren for the purpose of advancing the Technology to the stage of commercialization.

11.5 If UBC is of the view that the Licensee is not using its commercially reasonable efforts to develop, promote, market and sell products incorporating the Technology and/or grant sublicenses in respect of the same (the "**Minimum Requirements**"), UBC may give notice to the Licensee specifying the default and providing complete particulars supporting UBC's view and stating a reasonable period of time (the "**Remedy Period**") to remedy the breach. If following the expiry of the Remedy Period UBC remains of the view that the specified default has not been cured, UBC may refer the matter to evaluation in accordance with Article 11.6. Subject to Article 11.7, the parties will then appoint a mutually acceptable evaluator (the "**Evaluator**").

11.6 Unless the parties agree otherwise, the following rules and procedures govern the conduct of the parties and the Evaluator before and during the evaluation of a Dispute:

- (a) within 15 days of the appointment of the Evaluator, UBC will provide to the Evaluator and the Licensee a written summary of its position (the "**Dispute**") and copies of all documents on which it intends to rely in presenting its position before the Evaluator. On receiving UBC's summary and documents, the Licensee has 15 days to submit to UBC and the Evaluator a summary of the Licensee's position along with the documents on which the Licensee intends to rely;
- (b) after each of the Licensee and UBC has provided its summary and documents under Article 11.6(a), but not more than 60 days from the appointment of the Evaluator, the parties agree to meet in the presence of the Evaluator (the "**Dispute Resolution Meeting**") with a view to resolving the Dispute. The role of the Evaluator will initially be to assist in negotiating a resolution of a Dispute;
- (c) if the Dispute remains unresolved by the 30th day following the Dispute Resolution Meeting, UBC may request the Evaluator to make a determination as to whether or not, with respect to the subject matter of the Dispute, the Licensee has met the Minimum Requirements;
- (d) any information or documents disclosed by either party under this Article 11.6 must be kept confidential and must not be used except to attempt to resolve the Dispute; and
- (e) each party must bear its own costs of complying with this Article 11.6 and the parties must bear equally the costs of any Evaluator engaged.

11.7 If the parties cannot agree upon a mutually acceptable Evaluator within 30 days of a notice by UBC pursuant to Article 11.5, each of the parties shall choose an Evaluator who shall then, within 30 days of their appointment, choose a third Evaluator. The three Evaluators shall make a determination pursuant to Article 11.6(c) by majority vote. For the purposes of clarity, the provisions of Article 11.6 shall apply if three Evaluators are appointed and the reference to "Evaluator" in Article 11.6 shall be read as "Evaluators". If pursuant to Article 11.6(c) the Evaluators have made a determination that the Licensee has not met the Minimum Requirements, UBC may, upon written notice to the Licensee, terminate this Agreement or amend the license granted pursuant to this License Agreement from exclusive to non-exclusive.

12.0 ACCOUNTING RECORDS:

12.1 The Licensee will maintain at its principal place of business, or another place as may be most convenient, separate accounts and records of all Revenues, sublicenses and Sublicensing Revenues, and all business done in connection with the Technology or any Improvements. The accounts and records will be in sufficient detail to enable proper returns to be made under this Agreement. Without limiting the generality of the forgoing, the Licensee will maintain appropriate records of the production and utilization of the Technology, Improvements and Products in sufficient detail so that the Licensee will be able to report to UBC separately as follows:

- (a) the amount of Revenue received from practicing the DUR1, 2 Technology solely; and
- (b) the amount of Revenue received from practicing the DUR3 Technology solely; and
- (c) the amount of Revenue received from practicing the DUR1, 2 and DUR3 technologies together.

12.2 The Licensee will deliver to UBC on the date 30 days after each and every Royalty Due Date, together with the royalty payable under this Agreement, the Accounting for each of the categories listed in Article 12.1(a), (b) and (c). substantially in the form attached as Schedule "E" and a report on all Sublicensing activity, including an accounting statement setting out in detail how the amount of Sublicensing Revenue was determined and identifying each sublicensee and the location of the business of each sublicensee.

12.3 The calculation of royalties will be carried out in accordance with GAAP.

12.4 The Licensee will retain the accounts and records referred to in Article 12.1 for at least 6 years from when they were made and will permit any duly authorized representative of UBC to inspect the accounts and records during normal business hours of the Licensee at UBC's expense. The Licensee will provide to the representative all reasonable evidence as the representative deems necessary to verify the Accounting and will permit the representative to make copies of or extracts from the accounts, records and agreements at UBC's expense. If an inspection of the Licensee's records by UBC shows an under-reporting or underpayment by the Licensee of any amount to UBC, by more than 5% for any 12 month period, then the Licensee will reimburse UBC for the cost of the inspection as well as pay to UBC any amount found due (including any interest) within 30 days of notice by UBC to the Licensee.

12.5 During the term of this Agreement and after its expiry or termination UBC will use reasonable best efforts to ensure that all information provided to UBC or its representatives

under this Article remains confidential and is treated as confidential by UBC, provided that UBC may disclose such information to the Universities.

13.0 INSURANCE:

13.1 The Licensee will be required to procure and maintain relevant insurance (including public liability and commercial general liability insurance) as would be acquired by a reasonable and prudent businessperson carrying on a similar line of business.

13.2 Notwithstanding Article 13.1, one month before the First Use of the Technology, the Licensee will give notice to UBC of the terms and amount of the product liability, public liability, and commercial general liability insurance and such other types of insurance which it has placed. This insurance will:

- (a) be placed with a reputable and financially secure insurance carrier;
- (b) include UBC, its Board of Governors, faculty, officers, employees, students, and agents as additional insureds;
- (c) provide primary coverage regarding all activities under this Agreement;
- (d) include a waiver of subrogation against UBC, and a severability of interest and cross-liability clauses; and
- (e) provide that the policy cannot be cancelled or materially altered except on at least 30 days' prior notice to UBC.

13.3 UBC may from time to time require reasonable amendments to the terms or the amount of coverage contained in the Licensee's insurance policy. The Licensee will provide to UBC for its approval certificates of insurance evidencing the coverage seven days before the First Use of the Technology. The Licensee will not:

- (a) allow the First Use of the Technology or any Improvement to occur before the certificate is provided and approved by UBC; or
- (b) sell any Product or allow any third party to use the Technology, at any time unless the insurance outlined in Article 13.2 is in effect.

14.0 ASSIGNMENT & CHANGE OF CONTROL:

14.1 The Licensee will not assign, transfer, mortgage, pledge, financially encumber, grant a security interest, permit a lien to be created, charge or otherwise dispose of any or all of the rights granted to it under this Agreement without the prior written consent of UBC, except that an assignment to a subsidiary of the Licensee is expressly permitted provided that written notice is given to UBC and the subsidiary agrees, in writing, to be bound by the terms of this Agreement.

14.2 Except as expressly provided in this Article 14.2, UBC shall not be permitted to assign or otherwise transfer this Agreement or its rights, duties and obligations hereunder, or its ownership, in whole or in part, of all right, title and interest in and to the Technology and all Improvements. UBC will have the right to assign its rights, duties and obligations under this Agreement to a company of which it is the sole shareholder, or a society controlled by UBC which it has incorporated or which has purposes which are consistent with the objectives of

UBC provided that ownership of all right, title and interest in and to the Technology and all Improvements is concurrently transferred to the company or society, as the case may be, and further provided that the company or society, as the case may be, signs a written agreement with the Licensee which provides that the company or society assumes all obligations or covenants from UBC and that the Licensee retains all rights granted to the Licensee under this Agreement. Upon delivery to the Licensee of such written agreement acceptable to the Licensee acting reasonably, the Licensee will release and discharge UBC from all obligations or covenants made under this Agreement.

15.0 GOVERNING LAW:

15.1 This Agreement is governed by, and will be construed in accordance with, the laws of British Columbia and the laws of Canada in force in that province, without regard to its conflict of law rules. All parties agree that by executing this Agreement they have attorned to the jurisdiction of the Supreme Court of British Columbia. The parties agree that the British Columbia Supreme Court has exclusive jurisdiction over this agreement.

16.0 NOTICES:

16.1 All payments, reports and notices or other documents that a party is required or may want to deliver to any other party will be delivered:

- (a) in writing; and
- (b) either by personal delivery or by registered or certified mail (with all postage and other charges prepaid) at the address for the receiving party as set out in Article 16.2 or as varied by any notice.

Any notice personally delivered is deemed to have been received at the time of delivery. Any notice mailed in accordance with this Article 16.1 is deemed to have been received at the end of the fifth day after it is posted.

16.2 Addresses for delivery of notices:

If to UBC: The Director
 University - Industry Liaison Office
 University of British Columbia
 #103 – 6190 Agronomy Road,
 Vancouver, B.C., V6T 1Z3
 Telephone: (604)822-8580
 Fax: (604)822-8589

If to the Licensee: The President
 Functional Technologies Corp.
 1500-885 West Georgia Street
 Vancouver, British Columbia
 V6C 3E8
 Telephone: (604) 648-2200
 Fax: (604) 648-2201

17.0 TERM:

17.1 The term of this Agreement starts on the Start Date and ends on:

- (a) the day that is exactly 20 years later; or
- (b) the expiry of the last patent licensed under this Agreement,

whichever is last to occur, unless terminated earlier under Article 18.

18.0 TERMINATION OF AGREEMENT:

18.1 This Agreement automatically and immediately terminates without notice to the Licensee if any proceeding under the *Bankruptcy and Insolvency Act* of Canada, or any other statute of similar purpose, is started by or against the Licensee.

18.2 UBC may, at its option, terminate this Agreement with immediate effect by giving notice to the Licensee if one or more of the following occurs:

- (a) the Licensee becomes insolvent, as evidenced, for example (without limitation) by the appointment of a receiver, a receiver manager, the issuance of financial statements which according to GAAP would render the Licensee insolvent, the Licensee ceasing to have a chief place of business or the Licensee ceasing or threatening to cease carrying on business;
- (b) any execution or other enforcement process of any court becomes enforceable against the Licensee's rights under this Agreement or on any money due to UBC and is not released or satisfied by the Licensee within 30 days from the process becoming enforceable or being levied;
- (c) any resolution is passed or order made or other steps taken for the winding up, liquidation or other termination of the existence of the Licensee;
- (d) the Technology or any Improvements becomes subject to any security interest, lien, charge or encumbrance in favour of any third party claiming through the Licensee which is not released or satisfied by the Licensee within 30 days;
- (e) if the Licensee commits a material breach of any of Articles 4.1, 11.1 or 13, unless such breach was required to be made by law or by order of a court or regulatory body, and in the case of a material breach of Article 4.1, such breach is not remedied within 30 days of UBC giving the Licensee written notice specifying the breach;
- (f) if any sublicensee of the Licensee is in material breach of its sublicense with the Licensee and the Licensee does not require the sublicensee to cure the breach as specified in Schedule "E" to this Agreement unless the Licensee terminates the license if such material breach is not cured by the sublicensee within the required period; or
- (g) if the Licensee is in material breach of any other material agreement between the Licensee and UBC and the breach has not been cured within the time provided for the curing of the breach under the terms of the other agreement.

18.3 Other than as set out in Articles 11, 18.1 and 18.2, either party may terminate this Agreement for any material breach which is not remedied, following the expiry of the applicable time period specified below, after providing written notice to the party in breach specifying the breach:

- (a) 30 days notice in the case of any breach which can reasonably be remedied within 30 days of the delivery of such notice; or
- (b) if the breach cannot be remedied within 30 days and the breach is not remedied within such further period as may be reasonably necessary, or within 90 days after receipt of notice, whichever is sooner.

18.4 If this Agreement is terminated under Article 18.1 to 18.3, the Licensee will make all outstanding royalty payments to UBC as set out under Articles 5 and 6, and UBC may proceed to enforce payment of all outstanding royalties or other monies owed to UBC and to exercise any or all of the rights and remedies available under this Agreement or otherwise available by law or in equity, successively or concurrently, at the option of UBC. Within 5 days of the Effective Termination Date, the Licensee will deliver to UBC all Technology and any Improvements in its possession or control and has no further right of any nature at all in the Technology or any Improvements. If the Licensee has not delivered up the Technology and any Improvements within five business days from the Effective Termination Date, UBC may immediately and without notice enter the Licensee's premises and take possession of the Technology and any Improvements. The Licensee will pay all charges or expenses incurred by UBC in the enforcement of its rights or remedies against the Licensee under this Article 18.4, including without limitation UBC's reasonable legal fees and disbursements on an indemnity basis.

18.5 The Licensee and all sublicensees will cease to use the Technology or any Improvements in any manner at all or to manufacture or sell the Products within 5 business days from the Effective Termination Date. The Licensee will then deliver to UBC an accounting within 30 days from the Effective Termination Date. The accounting will specify, in or on such terms as UBC may in its sole discretion require, the inventory or stock of Products manufactured and remaining unsold on the Effective Termination Date. UBC will instruct that the unsold Products be stored, destroyed or sold under its direction, provided this Agreement was terminated under Article 18.2 or 18.3. Without limitation, if this Agreement is terminated under Article 18.1, no Products will be sold without the prior written consent of UBC. The Licensee will continue to make royalty payments to UBC in the same manner specified in Article 5 and 6 on all Products that are sold in accordance with this Article 18.5, notwithstanding anything contained in, or any exercise of rights by UBC, under Article 18.4.

18.6 Notwithstanding the termination or expiry of this Agreement, Article 12 remains in full force and effect until 6 years after:

- (a) all payments of royalty required to be made by the Licensee to UBC under this Agreement have been made by the Licensee to UBC; and
- (b) any other claim or claims of any nature or kind at all of UBC against the Licensee has been settled.

19.0 MISCELLANEOUS COVENANTS OF LICENSEE:

19.1 The Licensee represents and warrants to UBC that the Licensee is a corporation duly organized, existing and in good standing under the laws of British Columbia and has the power, authority and capacity to enter into this Agreement and to carry out the transactions contemplated by this Agreement, all of which have been duly and validly authorized by all requisite corporate proceedings.

19.2 The Licensee will comply in all material respects with all laws, regulations and ordinances, whether Federal, State, Provincial, County, Municipal or otherwise, with respect to the Technology and any Improvements and this Agreement.

19.3 Upon the presentation of itemized bills to the Licensee by UBC, the Licensee will pay all reasonable legal expenses and costs incurred by UBC after the date of full execution of this Agreement regarding any consents and approvals required from UBC, including without limitation reasonable expenses and costs regarding UBC's review of any sublicenses to be granted by the Licensee.

19.4 The Licensee will pay all taxes and any related interest or penalty payable by it designated in any manner at all and imposed as a result of the existence or operation of this Agreement, including without limitation tax which the Licensee is required to withhold or deduct from payments to UBC. The Licensee will provide to UBC evidence as may be required by Canadian authorities to establish that the tax has been paid. The royalties specified in this Agreement are exclusive of taxes. If UBC is required to collect a tax to be paid by the Licensee or any of its sublicensees, the Licensee will pay the tax to UBC on demand.

19.5 The obligation of the Licensee to make all payments under this Agreement is absolute and unconditional and is not, except as expressly set out in this Agreement, affected by any circumstance, including without limitation any set-off, compensation, counterclaim, recoupment, defence or other right which the Licensee may have against UBC, or anyone else for any reason at all.

19.6 The Licensee will pay interest on all amounts due and owing to UBC under this Agreement but not paid by the Licensee on the due date, at the rate of 1% per month. The interest accrues on the balance of unpaid amounts from time to time outstanding, from the date on which portions of the amounts become due and owing until payment in full.

20.0 MANAGEMENT OF CONFLICTS OF INTEREST:

20.1 Subject to Article 20.2 the Licensee and UBC agree, that:

- (a) the facilities and research programs of the Licensee will be conducted independently of all UBC facilities, faculty, students or staff, and in particular, independently of and from the Investigators and the laboratory facilities made available to the Investigators by reason of the Investigators' employment at UBC;
- (b) no students, post-doctoral fellows or other UBC staff will participate or be involved in the Licensee's research, projects or utilize its facilities; and
- (c) any disclosures of inventions made by the Investigators to the Licensee will be immediately forwarded by the Licensee to UBC.

20.2 The Licensee and UBC may, from time to time, enter into written agreements to permit activities which would otherwise be prohibited by Article 20.1 including, without limiting the generality of the foregoing, the CRA.

21.0 CONDITIONS PRECEDENT

21.1 The obligations of the Licensee shall be subject to TSX Venture Exchange approval of the grant of licenses hereunder as constituting the Licensee's Qualifying Transaction.

21.2 The obligations of UBC and the Licensee shall be subject to their execution of the CRA.

21.3 The obligations of the Licensee shall also be subject to the execution of the consulting agreement between the Licensee and Dr. Hennie van Vuuren referred to in Article 11.4.

21.4 The parties acknowledge that the conditions precedent set out above in Articles 21.1, 21.2 and 21.3 (collectively referred to as the "**Conditions Precedent**") were either removed in writing or waived on or before October 31, 2003.

22.0 GENERAL:

22.1 The Licensee will permit UBC, during normal business hours and upon UBC giving the Licensee at least one business day's prior written notice, to enter any premises of the Licensee for the purpose of ascertaining whether or not this Agreement has been, is being, or will be complied with by the Licensee.

22.2 Nothing contained in this Agreement is to be deemed or construed to create between the parties a partnership or joint venture. No party has the authority to act on behalf of any other party, or to commit any other party in any manner at all or cause any other party's name to be used in any way not specifically authorized by this Agreement.

22.3 Subject to the limitations in this Agreement, this Agreement operates for the benefit of and is binding on the parties and their respective successors and permitted assigns.

22.4 No condoning, excusing or overlooking by any party of any default, breach or non-observance by any other party at any time or times regarding any terms of this Agreement operates as a waiver of that party's rights under this Agreement. A waiver of any term, or right under, this Agreement will be in writing signed by the party entitled to the benefit of that term or right, and is effective only to the extent set out the written waiver.

22.5 No exercise of a specific right or remedy by any party precludes it from or prejudices it in exercising another right or pursuing another remedy or maintaining an action to which it may otherwise be entitled either at law or in equity.

22.6 Headings in this Agreement are for reference only and do not form a part of this Agreement and are not be used in the interpretation of this Agreement.

22.7 All terms in this Agreement which require performance by the parties after the expiry or termination of this Agreement, will remain in force despite this Agreement's expiry or termination for any reason.

22.8 Part or all of any Article that is indefinite, invalid, illegal or otherwise voidable or unenforceable may be severed from this Agreement and the balance of this Agreement will continue in full force and effect.

22.9 The Licensee acknowledges that the law firm of Richards Buell Sutton LLP has acted solely for UBC in connection with this Agreement and that all other parties have been advised to seek independent legal advice.

22.10 This Agreement sets out the entire understanding between the parties and no changes to this Agreement are binding unless signed in writing by the parties to this Agreement.

22.11 Time is of the essence of this Agreement.

22.12 In this Agreement, unless the contrary intention appears, the singular includes the plural and vice versa and words importing a gender include other genders.

22.13 This Agreement may be executed by facsimile, and in any number of counterparts.

22.14 The parties confirm that the 2003 License Agreement is superseded by this Agreement. For clarity, the parties however acknowledge and agree that the 2003 License Agreement remains, and has remained, in effect in accordance with its terms with respect to the period between the Start Date (July 1, 2003) and the Execution Date of this Agreement, and that the amendments contained in this Agreement are intended to take effect as of the Execution Date of this Agreement as set forth on the signature page of this Agreement below.

SIGNED BY THE PARTIES AS AN AMENDED AND RESTATED AGREEMENT on the 25th day of February, 2009 (the "**Execution Date**").

SIGNED FOR AND ON BEHALF of	)
THE UNIVERSITY OF BRITISH COLUMBIA	)
by its duly authorized officers:	)
	)
	)
<i>David P. Jones</i>	)
_____	)
Authorized Signatory	)
	)
	)
_____	)
Authorized Signatory	)
	)

FUNCTIONAL TECHNOLOGIES CORP.

Howard Louie

Authorized Signatory

SCHEDULE "A"
ASSIGNMENTS

COPY

CONFIDENTIAL

File No. 02-079 

November 21, 2002

Mr. Josy Reiffers
President de l'Université
Université Victor Segalen-Bordeaux 2
146, rue Léo Saignat
Bordeaux, Cedex
33076
France

AND

Dr. Michael Owen
Director, Office of Research Services
Brock University
500 Glenridge Avenue
St. Catharines, ON
L2S 3A1
Canada

Re: Assignment of Technology (our File No. 02-079)

Dear Mr. Reiffers and Dr. Owen,

We are writing to advise that we are endeavouring to commercialise a technology that was the result of research conducted by the University of British Columbia ("UBC"), Université Victor Segalen-Bordeaux 2 ("UVSB") and Brock University ("BU"), and led by Dr. Hennie van Vuuren of UBC.

This letter will confirm the agreement between UBC, UVSB and BU relating to the negotiation and administration of License Agreements, the assignment of UVSB's and BU's interest in the technology and the distribution of royalties, equity and other funds or consideration received under the terms of a License Agreement.

1.0 Assignment of Technology

1.1 UBC, UVSB and BU are joint inventors of the technology described in Schedule "A" (the "Technology"). In consideration of the mutual covenants and agreements set out in this letter agreement, UVSB and BU have agreed to hereby transfer, sell, and assign to UBC, all of their right, title and interest in, to and associated with the Technology, free and clear of all liens, encumbrances and interests of third parties.

1.2 UVSB and BU hereby agree to do such further acts and execute and deliver to UBC such further instruments as UBC may require to vest, effect, perfect, record, register, verify, evidence, or enforce its rights and interests in and to the Technology.

1.3 UBC will grant UVSB and BU the rights to use the Technology for internal research and non-commercial use. UBC shall have the right to review all publications related to the Technology, and to delay publication for up to 6 months. UBC shall also have the right to grant to third parties the right to subsequently reprint or otherwise reproduce such presentations and publications, subject to third party copyright restrictions.

2.0 Negotiation and Administration of a License Agreement

2.1 UBC will be responsible for negotiating the terms of all License Agreements. The format of License Agreements will be based on UBC's standard form of technology license.

2.2 UBC will keep UVSB and BU informed of any issues arising during such negotiations which will have a significant impact on UVSB or BU.

3.0 Division of Revenue

3.1 All revenue and other consideration generated from the licensing of the Technology shall be initially received by UBC from Licensees (the "Gross Revenue"). From Gross Revenue, UBC shall be reimbursed for all reasonable direct costs incurred by UBC in the preparation, filing, prosecution and maintenance of any patents, and any direct costs incurred by UBC in negotiating and drafting the License Agreement. The UBC University-Industry Liaison Office shall receive [REDACTED] of the net amount for administrative overhead. The remaining funds ("Net Revenues") shall be disbursed by UBC as follows:

The specified percentages have been omitted.

- (1) [REDACTED] shall be disbursed to UBC;
- (2) [REDACTED] shall be disbursed to UVSB; and
- (3) [REDACTED] shall be disbursed to BU.

The specified amount has been omitted.

3.2 UBC, UVSB and BU shall each be responsible for administering the distribution of their share of all Net Revenue to the inventors of the technology whom they employ. Such administration and distribution shall be carried out by UBC, UVSB and BU in accordance with their own policies and procedures.

4.0 Indemnification and Insurance

4.1 UVSB and BU shall indemnify, protect and save harmless UBC, its Boards of Governors, officers, employees, faculty, students, invitees, and agents against any and all claims arising out of the exercise by UBC of any rights under this Agreement to the extent that such claims are for losses caused by UVSB's or BU's fault or negligence.

4.2 UBC, UVSB and BU agree respectively to maintain appropriate third party liability insurance and comprehensive general liability insurance with respect to any of their respective governors, officers, employees, faculty, students, invitees, and agents in an appropriate amount, such amount to be reviewed and agreed upon from time to time. Each of the parties shall be solely responsible for the cost of their own insurance.

5.0 Term

5.1 This Agreement shall continue until the expiration of the last license agreement or other royalty or fee-bearing agreement, or expiration of the last patent related to the Technology, whichever is later. If the License Agreement is terminated for any reason this Agreement shall continue until the last payment of fees, royalties or any other amount due by the Licensee is paid and disbursed by UBC in accordance with the terms of this Agreement. Notwithstanding such termination of this agreement, clauses 1, 4 and 6 shall continue in force.

6.0 General

6.1 If any dispute arises between the parties under this Agreement, the parties shall appoint a conciliation committee composed of one nominee from each institution. The conciliation committee shall act expeditiously and shall present its recommendations for resolution of such dispute within ten days of appointment. If one or both of the parties do not accept the recommendations of the conciliation committee then the dispute shall be settled by a single arbitrator appointed pursuant to the provisions of the *Commercial Arbitration Act* of British Columbia, or any successor legislation then in force. The place of arbitration shall be Vancouver, British Columbia.

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CONFIDENTIAL

File No. 02-079

6.2 This Agreement shall be governed by and construed in accordance with the laws of the Province of British Columbia.

6.3 Nothing contained herein shall be deemed or construed to create between the parties hereto a partnership or joint venture. Except as expressly stated herein, no party shall have authority to act on behalf of any party hereto or to commit any other party in any manner. No party shall be liable for any act, omission, representation, obligation or debt of any other party, even if informed of such act, omission, representation, obligation or debt.

6.4 Any notice required or permitted to be given to any party hereunder shall be in writing and shall be deemed to have been duly given if delivered to the parties hereto at the addresses set out below:

If to UBC: The Managing Director
University - Industry Liaison Office
University of British Columbia
IRC 331 — 2194 Health Sciences Mall
Vancouver, British Columbia
V6T 1Z3

If to UVSB: Josy Reiffers, President de l'Université
AND Lucia Robert, Cellule Valorisation
Université Victor Segalen-Bordeaux 2
146, rue Léo Saignat
Bordeaux, Cedex
33076
France

If to BU: Michael Owen, Office of Research Services
Brock University
500 Glenridge Avenue
St. Catharines, ON
L2S 3A1
Canada

7.0 Counterparts

7.1 This agreement may be executed by facsimile, and in any number of counterparts.

This Agreement shall be effective as of December 1, 2002.

The University of British Columbia

Per:

"signed"

David P. Jones
Associate Director

Brock University

Per:

"signed"

Michael Owen
Director, Office of Research Services

Université Victor Segalen-Bordeaux

Per:

"signed"

Josy Reiffers
President de l'Université



SCHEDULE "B"

DESCRIPTION OF "TECHNOLOGY"

The "DUR1, 2 Technology"			
UBC File #	Inventor(s)	Description	Patent #
02-079	Drs. Hennie J.J. van Vuuren, Aline Lonvaue, Joana Coulon, and Deborah Inglis	Urea Degrading Yeast	US Provisional Patent Application Serial No. 60/330,993 filed 11/06/2001; Patent Cooperation Treaty Application Serial No. PCT/CA02/01719 filed 11/06/2002; European patent application #02771969.9 filed 11/06/2002 US patent application #10/494,742 filed 11/2/2004 Chilean patent application 0517-2004 filed 03/12/2004 Viet Nam patent application 1-2004-00554 filed 11/06/2002 Japanese patent application #2003-542625 filed 11/06/2002 Mexican patent application # PA/A/2004/004278 filed 11/06/2002 Chinese patent application #02821490.0 filed 11/06/2002 Indian patent application #01126/DELNP/20 filed 11/06/2002 Indonesian patent application W-00200400886 filed 11/06/2002 Russian Federation patent application 2004117153 filed 11/06/2002 Hungarian patent application P 04 01860 filed 11/06/2002 Canadian patent application #2,464,977 filed 11/06/2002 Hong Kong patent application #05102021.4 filed 11/06/2002 South African patent #2003/4529 issued 11/30/2005 Australian patent #2002336876 issued 05/15/2008

The "DUR3 Technology"			
UBC File #	Inventor(s)	Description	Patent #
08-113	Dr. Hennie J.J. van Vuuren, and John Ivan Husnik	Metabolic engineering of the yeast <i>Saccharomyces cerevisiae</i> to minimize production of ethyl carbamate via constitutive expression of the urea transporter DUR3	US Provisional patent application #61/071,138 filed April 14, 2008

SCHEDULE "C"

Semi-Annual Notice of Licensee Improvements
(due on the last day of June and December of each year)

Date of Notice:
Period:
Company Name:
Trading Symbol (if applicable):
Licensee Improvements
Licensee Improvement Disclosure Date:
Title of Licensee Improvement:
Inventors:
Brief Description of Licensee Improvement
Status of Research & Development

For further information on Improvements, please contact:

Name: _____ Title: _____
Telephone: _____

SCHEDULE "D"
MANDATORY SUBLICENSING PROVISIONS

- (a) The sublicense shall be personal to the sublicensee, shall not contain the right to grant any further sub-sublicenses and shall not be assignable without the prior written consent of UBC, which consent will not be unreasonably withheld. In addition, the sublicensee shall not transfer, mortgage, charge or otherwise dispose of any or all of the rights, duties or obligations granted to it under the sublicense without the prior written consent of UBC.
- (b) The sublicensee shall acknowledge all ownership of sublicensed Technology and any Improvements as set out in Article 2.1 of the agreement (the "**License Agreement**") to which this schedule is attached.
- (c) The sublicensee shall, upon request by the Licensee, enter into such further agreements and execute any and all documents as may be required to ensure that ownership of the Technology and all Improvements remain with UBC and the Licensee in accordance with the provisions of Article 2.1 of the License Agreement.
- (d) The sublicensee shall acknowledge that UBC and the Universities have the right to use the Technology and any Improvements without charge in any manner whatsoever for research, scholarly publication, educational and other non-commercial use provided that UBC complies with all obligations relating to the same as contained in the License Agreement.
- (e) Publication and Confidentiality
 - (i) The sublicensee shall keep and use all of UBC's Confidential Information in confidence and will not, without UBC's prior written consent, disclose any of UBC's Confidential Information to any person or entity, except those of the sublicensee's directors, officers, employees, consultants and professional advisors (collectively, the "**Approved Persons**") who require said Confidential Information in performing their obligations under the sublicense agreement and carrying on business. The sublicensee shall also covenant and agree that it will initiate and maintain an appropriate internal program limiting the internal distribution of UBC's Confidential Information to only those Approved Persons who require said Confidential Information in performing their obligations under the sublicense agreement and who are under obligations of confidentiality consistent to those of the License Agreement.
 - (ii) UBC and the Universities shall not be restricted from presenting at symposia, national or regional professional meetings, or from publishing in journals or other publications, accounts of its research relating to the Technology and/or Improvements, provided that UBC complies with all obligations relating to such publication as contained in the License Agreement.
- (f) The sublicensee shall agree not to use UBC's name, trade-marks, service marks, logos, insignia, seal, or designs without the prior written consent of UBC.

- (g) The sublicensee shall procure and maintain, commencing on the date stipulated in Article 13.3 of the License Agreement and continuing during the term of its sublicense, appropriate public liability, product liability and errors and omissions insurance with a reputable and financially secure insurance carrier which shall provide primary coverage with respect to the activities contemplated by the sublicense agreement. Such policies of insurance shall include UBC, its Board of Governors, faculty, officers, employees, students and agents as additional insureds, shall contain a waiver of subrogation against UBC and its Board of Governors, faculty, officers, employees, students and agents, and shall include severability of interest and cross-liability clauses. The sublicensee shall not conduct any sales of Products without giving notice to UBC of the terms and amounts of such insurance which it has placed in respect of the activities contemplated by the sublicense agreement.
- (h) The sublicensee shall acknowledge and agree that UBC makes no representations, conditions or warranties to the sublicensee, either express or implied, with respect to the Technology, any Improvements or the Products. Without limiting the generality of the foregoing, UBC specifically disclaims any implied warranty, condition or representation that the Technology, any Improvements or the Products:
 - (i) shall correspond with a particular description;
 - (ii) are of merchantable quality;
 - (iii) are fit for a particular purpose; or
 - (iv) are durable for a reasonable period of time.
- (i) The sublicensee shall indemnify holds harmless and defends UBC, its Board of Governors, officers, employees, faculty, students, invitees and agents against any and all claims (including all associated legal fees and disbursements actually incurred) arising out of the exercise of any rights under the sublicense agreement, including without limitation against any damages or losses, consequential or otherwise, arising in any manner at all from or out of the use of the Technology, any Improvements or Products sublicensed under the sublicense agreement by the sublicensee or its customers or end-users.
- (j) The sublicensee shall agree to limit its claims against UBC, whether under the express or implied terms of the sublicense agreement, in tort (including negligence) or at common law, for any loss or damage suffered by the sublicensee, whether direct, indirect or special, or any other similar damage that may arise or does arise from any breaches of the License Agreement by UBC, its Board of Governors, officers, employees, faculty, students or agents, to the amount of \$5,000.00.
- (k) The sublicensee shall also acknowledge and agree that UBC will not be liable to the sublicensee for consequential or incidental damages arising from any breach or breaches of the License Agreement.
- (l) The sublicensee shall agree to maintain at its principal place of business, or another place as may be most convenient, separate accounts and records of all

revenues and all business done in connection with the Technology or any Improvements. The accounts and records will be in sufficient detail to enable proper returns to be made under the sublicense agreement, and the License Agreement.

- (m) The sublicense agreement shall include termination provisions such that the sublicense agreement shall terminate:
 - (i) upon termination of the License Agreement between UBC and the Licensee for any reason whatsoever;
 - (ii) if any proceeding under any bankruptcy legislation is started by or against the sublicensee;
 - (iii) if the sublicensee ceases to carry on business or if the sublicensee becomes insolvent, or any resolution is passed or order made or other steps taken for the winding up, liquidation or other termination of the existence of the sublicensee;
 - (iv) any execution or other enforcement process of any court becomes enforceable against the sublicensee's rights sublicensed under the sublicense agreement or on any money due under the sublicense agreement and is not released or satisfied by the sublicensee within 30 days from the process becoming enforceable or being levied;
 - (v) the Technology or any Improvements become subject to any security interest, lien, charge or encumbrance in favour of any third party claiming through the sublicensee which is not released or satisfied within 30 days;
 - (vi) if the sublicensee shall be in material default under or shall fail to comply with any other material term of the sublicense agreement and:
 - (A) if such default is reasonably curable within thirty (30) days after receipt of notice of such default and such default or failure to comply is not cured within thirty (30) days after sublicensee's receipt of written notice thereof, or
 - (B) if such default is not reasonably curable within thirty (30) days after receipt of written notice thereof, and such default or failure to comply is not cured within such further reasonable period of time as may be necessary for the curing of such default or failure to comply;
 - (vii) if the sublicensee fails to procure or maintain insurance as required under the sublicense agreement, or
 - (viii) if the sublicensee grants a sub-sublicense of the sublicense agreement without UBC's prior written consent.
- (n) The sublicensee shall cease to use the Technology or any Improvements in any manner whatsoever or to manufacture the Products within five days from the effective date of termination of the sublicense agreement. If the sublicense agreement is terminated due to default of the Licensee, then the sublicensee will

be entitled to dispose of all previously made Products, but no more, and the terms of the sublicense agreement shall continue to be applicable during the period that the sublicensee carries out such disposition.

SCHEDULE "E"

Payment Report for the Period _____, 20 to _____, 20

Instructions for Completing this Report

Please fill out each section in full, identifying in the Royalty Summary Table the unit sales and geographical sales areas. If the license with UBC involves several product lines, please prepare a separate Summary Table for each product line. For licenses involving sublicensing revenue, please prepare an additional report for each sublicense.

PLEASE NOTE: An interest rate of 1% per month will be assessed against all payments in arrears.

Prepared by _____ Date _____ Phone _____
 Approved by _____ Date _____ Phone _____

Licensee Functional Agreement # UBC ID # 02-079
 Technologies Corp. 08-113

UBC Technology Urea Degrading Wine Yeast

Report Type (check one and complete as appropriate)

Single Product Line ☐ Product Line Trade Name _____

Multiple Products ☐ Page ____ of ____ Product Line Trade Name _____

Sublicense Report ☐ Page ____ of ____

Payments this Quarter (please complete separate tables for multiple product lines)

Royalties on Product Sales

Country	Units Sold	Unit Price (domestic currency)	Gross sales	Less Allowances*	Net Sales	Royalty Rate	Conversion Rate (to Canadian \$)	Period Royalty Amount (Canadian \$)	
								This yr	Last yr
Canada									
US									
Europe (specify countries)									
Japan									
Other									
Total Product Royalties									

Additional Payments (complete all that apply)

Minimum Royalty Fee	☐	Amount	
Milestone Payment	☐	Amount	
Annual License Maintenance Fee	☐	Amount	
Total Payments for Period			
			This Year Last Year

*Please indicate the reasons for returns or other allowances, if significant. Please note any unusual occurrences that affected royalty amounts during the period.

For further information, please contact _____ **At phone number** _____